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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/810,564	LUECK, MICHAEL F.
	Examiner	**Art Unit**
	PARAS SHAH	2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _02/17/2009_.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1,3-10 and 12-26_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1,3-10 and 12-26_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   This Office Action is in response to the Amendments and Arguments filed on

02/17/2009. Claims 1, 3-10, 12-26 remain pending. The Applicants' amendment and

remarks have been carefully considered, but they are not persuasive.

2.   All previous objections and rejections directed to the Applicant's disclosure and

claims not discussed in this Office Action have been withdrawn by the Examiner.

Continued Examination Under 37 CFR 1.114

3.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on

02/17/2009 has been entered.

Response to Amendments and Arguments

4.   Applicant's arguments filed 02/17/2009 with respect to claims 1, 3-10, and 12-26

have been fully considered but they are not persuasive for the reasons noted below.

With regard to the Applicant's first argument, regarding the dynamic

determination of contextual state, where the secondary reference of Hummel does not

discuss the use of context, the Examiner respectfully disagrees. In Hummel, context is

being utilized, where in col. 4, lines 3-8 and lines 20-22, contextual information is used

to determine how certain words are translated. The use of contextual information is evident in col. 7, lines 34-36 and lines 44-52, where the views of the entire token is utilize to determine whether a placeable exists. The context being used is the token information and character information (one character at a time) to distinguish and identify the contextual state (placeable type) and the entire expression for which the placeable exists for translation (see col. 7, lines 59-60, where the miles per hour and kilometers per hour are converted based on the identification.). Further, in col. 8, lines 1-10, the language (noting it is a German) context is utilized in order to convert the placeable into the language that it is more suitable for based on past information (also context). Further, the Applicant states that the placeables are context free and points to col. 7, lines 54-55. The Examiner respectfully disagrees. The fact that the placeables are not likely to vary by context does not make the placeables context free. This is the case as in the example provided above, where the placeable changes its number type based on language and changes type of placeable by the viewing of the entire token or each character. As mentioned above, the determination of each character and views of the entire token is dynamic since the next character or token part can cause the placeable not to be identified. The Applicant is reminded that the terminology of "contextual state" is given its broadest reasonable interpretation consistent with the specification. Further, Hummel only states in col. 7, lines 54-56, that numbers and graphs may not vary by context but does not indicate that proper nouns vary do not vary with context.

With regard to the Applicant's second and third arguments, regarding the word "called" and the determination of context states in assembling expression, the Applicant is directed to the arguments presented above. Further, the Applicant's position that the examination of each character of a token to identify a placeable does not imply the use of context is respectfully traversed by the Examiner. The use of information of each character allows the placeable to be determined. The word context is defined according to Merriam Webster to be "the parts of a discourse that surround a word or passage and can throw light on its meaning" (see Merriam Webster Online). In the present case, the parts being the character information and surrounding text of the unidentified placeable allow the placeable to be determined. It is further noted that the Applicant has not provided a specific definition of the word "context" in order for it to be interpreted in another manner.

With regards to the Applicant's arguments presented on page 12, the Applicant argues that the context being referred is relative to the entire document and not for a particular word. The Examiner respectfully disagrees with this assertion. Although the "entire information" of the context is denoted in Hummel, Hummel does not require that the context of the entire document be utilized, but rather the translation portion that has been designated. It would be obvious to one skilled in the art that such designation can be a word or multiple words. The Applicant has not provided any evidence that the context refers to an entire document and this document contains more than one word. Further, the applicant submits that the "context and environment" of Hummel allows the correct placeables to be determined based on language and is not based on a "dynamic

identification of context." The Examiner respectfully disagrees with this assertion. The

adjustment of these measurements, for example, English into German, is determined

based on context. In order for the proper placeable to be used, the language is taken

into consideration. Although it is true that the placeable appears in a form that would

make sense in that language in which it appears, thus further providing evidence that

based on the language a different placeable would be used and thus is dynamic in

nature based on the language and each character.

With regards to the Applicant's arguments presented on page 14 (B and C), the

Applicant argues that no determination of a contextual state is made and it is made

dynamically. The Examiner respectfully disagrees with this assertion in view of the

arguments presented above.

With regards to the Applicant's arguments presented on page 15 (D), the

Applicant argues that clarification is needed since it was not clear as to what was meant

by "…the next token is viewed." What was meant was that the words within the token,

as the token in Hummel contains more than one word, is used in order to determine the

full placeable to be inserted.

Claim Objections

5.   Claim 20 is objected to because of the following informalities: "the dictionary

database module" in line20 should be "the dictionary database". Appropriate correction

is required.

Claim Rejections - 35 USC § 101

6.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7.   Claims 1, 3-9 and 20-26 are rejected under 35 U.S.C. 101 because the claims appear to be directed to a software embodiment and not to a hardware embodiment, where a machine claim is directed towards a system, apparatus, or arrangement. The claim limitations, which are means plus function, appear to be directed towards a program as stated in the published application, paragraph [0032], where Figure 1 is a block diagram showing the claimed elements. The limitations present in the independent claims 1 and 20 pertain to modules, where it is reasonably evident to one skilled in the art that modules are nothing more than software or program components. Further, the dictionary database, as recited in the first paragraph of the limitation, is not a physical structure for the claim to be statutory since the dictionary database is an abstract component containing data (see Applicant's specification, [0035], dictionary database 24). Since, all of the claimed limitations pertain to program modules, the claim is directed to software and not hardware. Thus, the claims are directed towards non-statutory subject matter. The dependent claims fail to overcome the aforementioned rejection. Further, the claimed invention is to a "computer program" *per se* as recited in the preamble and as such is non-statutory subject matter. See MPEP 2106.01 [R-5]. Data structures not claimed as embodied in computer readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional

change in the computer. See e.g., Warmerdam, 33 F.3d at 1361, 31, USPQ2d at 1760

(claim to a data structure *per se* held nonstatutory). Such claimed data structures do not

define any structural and functional interrelationships between data and other claimed

aspects of the invention, which permit the data structure's functionality to be realized. In

contrast, a claimed computer readable medium encoded with a data structure defines

structural and functional interrelationships between the data structure and the computer

software and hardware components which permit the data structure's functionality to be

realized, and is thus statutory.

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

9.   **Claims 1, 3-10, 12-26** are rejected under 35 U.S.C. 103(a) as being

unpatentable over Alleva et al., Patent No. US 5,970,449 ("ALLEVA") in view of Hummel

et al., Patent No. US 7,020,601 ("HUMMEL").

10.   Regarding **claim 1**, ALLEVA teaches a configurable formatting system for

generating a desired representation of an expression within a word list ("a context-free

grammar is applied to perform the text normalization", ALLEVA, column 2, lines 59-60),

said system comprising:

(a) a dictionary database ("context-free grammar 40", ALLEVA, column 5, line

26) for storing at least one category ("divided into three major sections ... '[spacing]',

'[capitalization]', '[Rules]'", ALLEVA, column 5, lines 30-33), said category containing at

least one word and at least one translation rule ("includes substitute text 54 that

replaces the text that was output", ALLEVA, column 4, lines 56-57);

(b) a configuration file coupled to the dictionary database containing at least one

variant to the contents of at least one category of the dictionary database ("the text file

may be merely edited", ALLEVA, column 8, lines 54-55), said variant to the contents of

at least one category being used to overwrite the contents of said at least one category

within said dictionary database ("the tree is revised accordingly by reading the contents

from the edited text file altering the tree in a matching fashion", ALLEVA, column 8, lines

58-60);

(c) a working list module coupled to the dictionary database for reading a word

from the word list ("words are stored within a text buffer 122 that is used by the text

normalizer 38", ALLEVA, column 8, lines 4-5) and determining whether a word is

associated with the expression by utilizing the categories of said dictionary database for

said word ("processed by the text normalizer to determine whether there are any

matching rules or not", ALLEVA, column 8, lines 6-7), said working list module being for:

(i) inserting the word into a working list if the word is associated with the

expression (see ALLEVA, FIG. 9, words are inserted into the processed buffer 124);

(ii) processing the working list when the word is associated with the

termination of the expression ("a rule will be applied when at least a complete rule has

been identified and no further portion of a rule can be applied", ALLEVA, column 7, lines

52-54, see also column 8, lines 1-27 for an example); and

(d) a formatting module coupled to the working list module for processing the

words from the working list and generating the desired representation of the expression

from the working list (see ALLEVA, column 8, lines 1-27, FIG. 9, the text normalizer 38

applies the rules).

However, ALLEVA does not disclose dynamically identifying the contextual state

of a word.

In the same field of text normalization, HUMMEL teaches identifying the

contextual state of a word (placeable determined based on context and environment,

HUMMEL, column 4, lines 3-10 and see col. 4, lines 23-26, placeable is identified in

order to facilitate subsequent handling and see col.7, lines 25-31, 44-51, the

determination of a date is determined using views of the entire token) (e.g. The said

identifying is dynamic where each placeable is identified and converted based on

determiner placeable type.) and determining whether a word is associated with the

expression utilizing the contextual state (see col. 7, lines 44-51, where state is

determined by looking at the entire token. Further, in order to determine the type of

conversion needed the next token is viewed, thus utilizing a context.).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made check the context as taught by HUMMEL on the

normalizations used by ALLEVA in order to improve the translation of data not requiring

translation to provide a proper selection of the word (see HUMMEL col. 3, lines 12-16

and lines 60-67)

11.   Regarding **claim 3**, ALLEVA further teaches that the working list module is either

in a NoCheck state or in a WordInNumber state according to the following:

        (i) when working list is empty, working list module is in a NoCheck state (see

ALLEVA, FIG. 7, node 100);

        (ii) working list module enters into a WordInNumber state when the word being

read is associated with the expression (see ALLEVA, FIG. 7, node 102); and

        (iii) working list module returns to the NoCheck state when the word being read is

associated with the termination of the expression ("a rule will be applied when at least a

complete rule has been identified and no further portion of a rule can be applied",

ALLEVA, column 7, lines 52-54, see also ALLEVA, column 8, lines 1-27 for an

example).

12.   Regarding **claim 4**, ALLEVA further teaches that said working list module is

further determines whether a word is associated with the expression, by:

        (iv) determining whether the working list module is in the WordInNumber state

('the number rule 128 is applied to replace 'twenty' with '20'", ALLEVA, column 8, lines

23-24);

(v) determining whether the working list module is in the NoCheck state and the

word is a numeral ("the first word, 'five,' is processed … there will be a match within the

digit rule 126 for this word", ALLEVA, column 8, lines 5-8); and

(vi) if either (iv) or (v) is true then determining that the word is associated with the

expression (see ALLEVA, FIG. 9).

13.   Regarding **claim 5**, ALLEVA further teaches that the word is associated with the

termination of an expression when the word is a punctuation character ("if a period is

followed by a space, two spaces are to be substituted for the single space", ALLEVA,

column 5, lines 49-52).

14.   Regarding **claim 6**, ALLEVA further teaches that the word is associated with the

termination of an expression when the word is not present within any of the categories

of the dictionary database ("before applying the rule, the text normalizer 38 looks at the

next word 'chickens' as there is no rule that applies to the phrase 'five chickens,' the text

normalizer 38 knows that it is done", ALLEVA, column 8, lines 8-11).

15.   Regarding **claim 7**, ALLEVA further teaches that said formatting module looks up

the category associated with a word within the dictionary database (see ALLEVA, FIG.

9, rules 126, 128, and 130).

16.   Regarding **claim 8**, ALLEVA further teaches that said formatting module formats

the word according to the translation rule associated with the category associated with

the word (see ALLEVA, FIG. 9).

17.   Regarding **claim 9**, ALLEVA further teaches that the category for the word is

used to format the word in association with another word within working list ("the system

seeks to apply the rule that will normalize the greatest length string within the text",

ALLEVA, column 7, lines 48-49, see also column 8, lines 1-27 for an example).

18.   Regarding **claim 10**, ALLEVA teaches a configurable formatting method for

generating a representation of an expression within a recognized word list ("a context-

free grammar is applied to perform the text normalization", ALLEVA, column 2, lines 59-

60), said method comprising:

        (a) storing at least one category ("divided into three major sections ... '[spacing]',

'[capitalization]', '[Rules]'", ALLEVA, column 5, lines 30-33) in a dictionary database

("context-free grammar 40", ALLEVA, column 5, line 26), said category containing at

least one word and at least one translation rule ("includes substitute text 54 that

replaces the text that was output", ALLEVA, column 4, lines 56-57);

        (b) storing at least one variant to the contents of at least one category of the

dictionary database in a configuration file ("the text file may be merely edited", ALLEVA,

column 8, lines 54-55) and using the contents of at least one category to overwrite the

contents of said at least one category within said dictionary database ("the tree is

revised accordingly by reading the contents from the edited text file altering the tree in a

matching fashion", ALLEVA, column 8, lines 58-60);

(c) reading a word from the word list ("words are stored within a text buffer 122

that is used by the text normalizer 38", ALLEVA, column 8, lines 4-5) and determining

whether the word is associated with the expression by utilizing the categories of said

dictionary database ("processed by the text normalizer to determine whether there are

any matching rules or not", ALLEVA, column 8, lines 6-7);

(d) inserting the word into a working list if the word is associated with the

expression (see ALLEVA, FIG. 9, words are inserted into the processed buffer 124);

(e) processing the working list when a word is associated with the termination of

the expression ("a rule will be applied when at least a complete rule has been identified

and no further portion of a rule can be applied", ALLEVA, column 7, lines 52-54, see

also ALLEVA, column 8, lines 1-27 for an example); and

(f) formatting the words from the working list and generating the desired

representation of the expression from the working list (see ALLEVA, column 8, lines 1-

27, FIG. 9, the text normalizer 38 applies the rules).

However, ALLEVA does not disclose dynamically identifying the contextual state

of a word.

In the same field of text normalization, HUMMEL teaches identifying the

contextual state of a word (placeable determined based on context and environment,

HUMMEL, column 4, lines 3-10 and see col. 4, lines 23-26, placeable is identified in

order to facilitate subsequent handling and see col.7, lines 25-31, 44-51, the

determination of a date is determined using views of the entire token) (e.g. The said identifying is dynamic where each placeable is identified and converted based on determiner placeable type.) and determining whether a word is associated with the expression utilizing the contextual state (see col. 7, lines 44-51, where state is determined by looking at the entire token. Further, in order to determine the type of conversion needed the next token is viewed, thus utilizing a context.).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made check the context as taught by HUMMEL on the normalizations used by ALLEVA in order to improve the translation of data not requiring translation to provide a proper selection of the word (see HUMMEL col. 3, lines 12-16 and lines 60-67).

19.   Regarding **claim 12**, ALLEVA further teaches that (c) further comprises moving between a NoCheck state or in a WordInNumber state according to the following:

(i) when working list is empty, being in a NoCheck state (see FIG. 7, node 100);

(ii) entering into a WordInNumber state when the word being read is associated with the expression (see FIG. 7, node 102); and

(iii) returning to the NoCheck state when the word being read is associated with the termination of the expression ("a rule will be applied when at least a complete rule has been identified and no further portion of a rule can be applied", column 7, lines 52-54, see also column 8, lines 1-27 for an example).

20.   Regarding **claim 13**, ALLEVA further teaches that (c) further comprises:

(iv) determining whether the working list module is in the WordInNumber state

('the number rule 128 is applied to replace 'twenty' with '20'", column 8, lines 23-24);

(v) determining whether the working list module is in the NoCheck state and the

word is a numeral ("the first word, 'five,' is processed … there will be a match within the

digit rule 126 for this word", column 8, lines 5-8); and

(vi) if either (iv) or (v) is true then determining that the word is associated with the

expression (see FIG. 9).

21.   Regarding **claim 14**, ALLEVA further teaches that the word is associated with the

termination of an expression when the word is a punctuation character ("if a period is

followed by a space, two spaces are to be substituted for the single space", column 5,

lines 49-52).

22.   Regarding **claim 15**, ALLEVA further teaches that the word is associated with the

termination of an expression when the word is not present within any of the categories

of the dictionary database ("before applying the rule, the text normalizer 38 looks at the

next word 'chickens' as there is no rule that applies to the phrase 'five chickens,' the text

normalizer 38 knows that it is done", column 8, lines 8-11).

23.   Regarding **claim 16**, ALLEVA further teaches that (f) further comprises looking

up the category associated with a word within the dictionary database (see FIG. 9, rules

126, 128, and 130).

24.   Regarding **claim 17**, ALLEVA further teaches that the category associated with

the word is used to format the word in association with another word within working list

("the system seeks to apply the rule that will normalize the greatest length string within

the text", column 7, lines 48-49, see also column 8, lines 1-27 for an example).

25.   Regarding **claim 18**, HUMMEL further teaches that list module is further adapted

to determine whether the working list module is in the WordInNumber state or NoCheck

state by utilizing a context indicia, where said context indicia tracks the contextual state

of the working list module (see HUMMEL, column 7, lines 1-51, a series of rules defines

the contextual state of the word) (e.g. The contextual state of the word is tracked by

viewing the entire token for placeable type determination.).

26.   Regarding **claim 19**, HUMMEL further teaches that (c) further comprises

determining whether the working list module is in the WordInNumber state or NoCheck

state by utilizing a context indicia, where said context indicia tracks the contextual state

of the working list module (see HUMMEL, column 7, lines 1-51, a series of rules defines

the contextual state of the word) (e.g. The contextual state of the word is tracked by

viewing the entire token for placeable type determination.).

27.   Regarding **claim 20**, ALLEVA teaches a configurable formatting system for

generating a desired representation of an expression within a word list ("a context-free

grammar is applied to perform the text normalization", ALLEVA, column 2, lines 59-60),

said system comprising:

(a) a dictionary database ("context-free grammar 40", ALLEVA, column 5, line

26) for storing at least one category ("divided into three major sections ... '[spacing]',

'[capitalization]', '[Rules]'", ALLEVA, column 5, lines 30-33), said category containing at

least one word and at least one translation rule ("includes substitute text 54 that

replaces the text that was output", ALLEVA, column 4, lines 56-57);

(b) a configuration file coupled to the dictionary database containing at least one

variant to the contents of at least one category of the dictionary database ("the text file

may be merely edited", ALLEVA, column 8, lines 54-55), said variant to the contents of

at least one category being used to overwrite the contents of said at least one category

within said dictionary database ("the tree is revised accordingly by reading the contents

from the edited text file altering the tree in a matching fashion", ALLEVA, column 8, lines

58-60);

(c) a working list module coupled to the dictionary database for reading a word

from the word list ("words are stored within a text buffer 122 that is used by the text

normalizer 38", ALLEVA, column 8, lines 4-5) and determining whether a word is

associated with the expression by utilizing the categories of said dictionary database for

said word ("processed by the text normalizer to determine whether there are any

matching rules or not", ALLEVA, column 8, lines 6-7), said working list module being for:

(i) inserting the word into a working list if the word is associated with the

expression (see ALLEVA, FIG. 9, words are inserted into the processed buffer 124);

(ii) processing the working list when the word is associated with the

termination of the expression ("a rule will be applied when at least a complete rule has

been identified and no further portion of a rule can be applied", ALLEVA, column 7, lines

52-54, see also column 8, lines 1-27 for an example); and

(d) a formatting module coupled to the working list module for processing the

words from the working list and generating the desired representation of the expression

from the working list (see ALLEVA column 8, lines 1-27, FIG. 9, the text normalizer 38

applies the rules) said formatting module is adapted to look up the category associated

with a word within the dictionary database (see ALLEVA, FIG. 9, rules 126, 128, and

130).

However, ALLEVA does not disclose dynamically identifying the contextual state

of a word.

In the same field of text normalization, HUMMEL teaches identifying the

contextual state of a word (placeable determined based on context and environment,

HUMMEL, column 4, lines 3-10 and see col. 4, lines 23-26, placeable is identified in

order to facilitate subsequent handling and see col.7, lines 25-31, 44-51, the

determination of a date is determined using views of the entire token) (e.g. The said

identifying is dynamic where each placeable is identified and converted based on

determiner placeable type.) and determining whether a word is associated with the

expression utilizing the contextual state (see col. 7, lines 44-51, where state is

determined by looking at the entire token. Further, in order to determine the type of

conversion needed the next token is viewed, thus utilizing a context.).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made check the context as taught by HUMMEL on the

normalizations used by ALLEVA in order to improve the translation of data not requiring

translation to provide a proper selection of the word (see HUMMEL col. 3, lines 12-16

and lines 60-67).

28.   Regarding **claim 21**, ALLEVA further teaches that the category associated with

the word is used to format the word in association with another word within working list

("the system seeks to apply the rule that will normalize the greatest length string within

the text", column 7, lines 48-49, see also column 8, lines 1-27 for an example).

29.   Regarding **claim 22**, ALLEVA further teaches that the working list module is

either in a NoCheck state or in a WordInNumber state according to the following:

(i) when working list is empty, working list module is in a NoCheck state (see

ALLEVA, FIG. 7, node 100);

(ii) working list module enters into a WordInNumber state when the word being

read is associated with the expression (see ALLEVA, FIG. 7, node 102); and

(iii) working list module returns to the NoCheck state when the word being read is

associated with the termination of the expression ("a rule will be applied when at least a

complete rule has been identified and no further portion of a rule can be applied",

ALLEVA, column 7, lines 52-54, see also ALLEVA, column 8, lines 1-27 for an

example).

30.   Regarding **claim 23**, ALLEVA further teaches that said working list module is

further determines whether a word is associated with the expression, by:

(iv) determining whether the working list module is in the WordInNumber state ('the

number rule 128 is applied to replace 'twenty' with '20'", ALLEVA, column 8, lines 23-

24);

        (v) determining whether the working list module is in the NoCheck state and the

word is a numeral ("the first word, 'five,' is processed … there will be a match within the

digit rule 126 for this word", ALLEVA, column 8, lines 5-8); and

        (vi) if either (iv) or (v) is true then determining that the word is associated with the

expression (see ALLEVA, FIG. 9).

31.   Regarding **claim 24**, ALLEVA further teaches that the word is associated with the

termination of an expression when the word is a punctuation character ("if a period is

followed by a space, two spaces are to be substituted for the single space", column 5,

lines 49-52).

32.   Regarding **claim 25**, ALLEVA further teaches that the word is associated with the

termination of an expression when the word is not present within any of the categories

of the dictionary database ("before applying the rule, the text normalizer 38 looks at the

next word 'chickens' as there is no rule that applies to the phrase 'five chickens,' the text

normalizer 38 knows that it is done", column 8, lines 8-11).

33.   Regarding **claim 26**, HUMMEL further teaches that (c) further comprises

determining whether the working list module is in the WordInNumber state or NoCheck

state by utilizing a context indicia, where said context indicia tracks the contextual state

of the working list module (see HUMMEL, column 7, lines 1-51, a series of rules defines

the contextual state of the word) (e.g. The contextual state of the word is tracked by

viewing the entire token for placeable type determination.).

Conclusion

34.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

        Kalyanswamy (US 5,761,640) is cited to disclose a name and address processor.

Ulicny et al. (US 6,490,549) is cited to disclose automatic orthographic transformation of

a text stream.

        Any inquiry concerning this communication or earlier communications from the

examiner should be directed to PARAS SHAH whose telephone number is (571)270-

1650. The examiner can normally be reached on MON.-THURS. 7:00a.m.-4:00p.m.

EST.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David Hudspeth can be reached on (571)272-7843. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

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